

67CFS Series Installation Sheet

Introduction

This installation sheet covers the installation and startup of the 67CFS Series filter regulators. If maintenance is required, refer to the 67C Series Instruction Manual, form 5469. Contact your local Sales Office to receive a copy of the instruction manual.

Specifications

- **Maximum Inlet Pressure:**
250 psig (17,2 bar)
- **Maximum Outlet Pressure:**
50 psi (3,4 bar) over outlet pressure setting
- **Outlet Pressure Ranges:**
0 to 35 psig (0 to 2,4 bar)
0 to 60 psig (0 to 4,1 bar)
0 to 125 psig (0 to 8,6 bar)
0 to 150 psig (0 to 10,3 bar)
- **Temperature Capabilities with Nitrile (NBR):**
-40° to 180°F (-40° to 82°C)

Installation



WARNING

Personal injury, property damage, equipment damage, or leakage due to escaping gas or bursting of pressure containing parts may result if this regulator is overpressured or is installed where service conditions could exceed the limits given in the specifications, or where conditions exceed any ratings of the adjacent piping or piping connections. To avoid such injury or damage, provide pressure relieving or pressure limiting devices (as required by the appropriate code, regulation, or standard) to prevent service conditions from exceeding those limits.

The internal relief valve in the Type 67CFSR regulator does not provide full overpressure protection.

The internal relief valve is designed for minor seat leakage only. If maximum inlet pressure to the Type 67CFSR exceeds the maximum pressure ratings of the downstream equipment or exceeds the maximum allowable outlet pressure of the Type 67CFSR, additional overpressure protection is required.

1. Regulator operation within ratings does not preclude the possibility of physical damage from external sources or debris in the lines. Regulators should be inspected for damage periodically and after an overpressure condition.
2. Only personnel qualified through training and experience should install, operate, and maintain a regulator. Make sure there is no damage to or foreign material in the regulator and all tubing/piping is free of debris.
3. Install the regulator so that flow is from the IN to the OUT connection as marked on the regulator body.
4. For best drainage, orient the drain valve (key 2) to the lowest possible point on the dripwell (key 5). This orientation may be improved by rotating the dripwell with respect to the body (key 1).



WARNING

A regulator may vent some gas to the atmosphere. In hazardous or flammable gas service, vented gas may accumulate and cause personal injury, death, or property damage due to fire or explosion. Vent a regulator in hazardous gas service to a remote, safe location away from air intakes or any hazardous area. The vent line or stack opening must be protected against condensation or clogging.



67CFS Series

- 5. A clogged spring case vent hole may cause the regulator to function improperly. To keep this vent hole from being plugged (and to keep the spring case from collecting moisture, corrosive chemicals, or other foreign material) orient the vent to the lowest possible point on the spring case or otherwise protect it. Inspect the vent hole regularly to make sure it is not plugged. Spring case vent hole orientation may be changed by rotating the spring case with respect to the body. The 1/4-inch threaded NPT spring case vent may be remotely vented by installing tubing or piping into the vent.
- 6. For regulator shutdown, install upstream block and vent valves and downstream block and vent valves (if required), or provide some other suitable means of properly venting the regulator inlet and outlet pressures.
- 7. Apply a good grade of pipe compound to the male pipe threads before making connections, making sure not to get the pipe compound inside the regulator.
- 8. Install tubing fitting or piping into the 1/4-inch threaded NPT inlet connection on the body (key 1) and into the 1/4-inch threaded NPT body outlet connection.
- 9. The second 1/4-inch threaded NPT outlet can be used for a gauge or other use. If not used, it must be plugged.
- 10. When installing a 67CFS Series regulator in an existing installation, it may be necessary to use spacers to adapt the installation. If the mounting bolts are too long, place a spacer on the bolt. To be sure the regulator is secure, the bolts should have at least two full threads of engagement.

Startup and Adjustment

- 1. With proper installation completed and downstream equipment properly adjusted, slowly open the upstream and downstream shutoff valve (when used) while using pressure gauges to monitor pressure.

of accumulated gas, never adjust the control spring to produce an outlet pressure higher than the upper limit of the outlet pressure range for that particular spring. If the desired outlet pressure is not within the range of the control spring, install a spring of the proper range.

- 2. If outlet pressure adjustment is necessary, monitor outlet pressure with a gauge during the adjustment procedure. The regulator is adjusted by loosening the locknut (key 19), if used, and turning the adjusting screw or handwheel (key 18) clockwise to increase or counterclockwise to decrease the outlet pressure setting. Tighten the locknut to maintain the adjustment position.

Parts List

Key	Description
1	Body
2	Drain Valve
3	Flange Screw
4 ⁽¹⁾	O-Ring
5	Dripwell
6 ⁽¹⁾	Filter Element
7	Spring Case
9	Filter Retainer
10 ^(1, 2)	Valve Cartridge
11 ^(1, 2)	Valve Plug
12 ^(1, 2)	Valve Spring
13 ^(1, 2)	Valve Retainer
14 ^(1, 2)	O-Ring
15 ^(1, 2)	Relief Valve Soft Seat
16 ⁽¹⁾	Diaphragm Assembly
17	Spring
18	Adjusting Screw
19	Locknut
20	Upper Spring Seat
23	1/4-Inch Pipe Plug (not shown)
25	Label
26 ⁽¹⁾	Filter Gasket
33	Closing Cap
34	Spacer
37	Thrust Washer
45	Vent Screen

1. Recommended Spare Part
2. Valve cartridge assembly includes keys 10, 11, 12, 13, 14, and 15.



WARNING

To avoid personal injury, property damage, or equipment damage caused by bursting of pressure containing parts or explosion

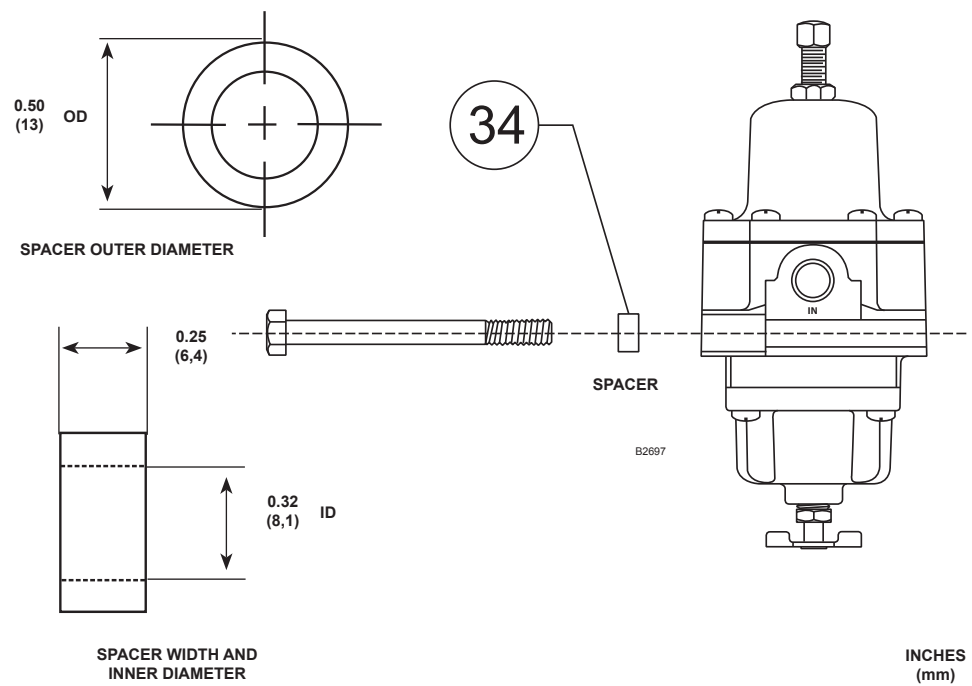


Figure 1. Spacer Diameter and Installation

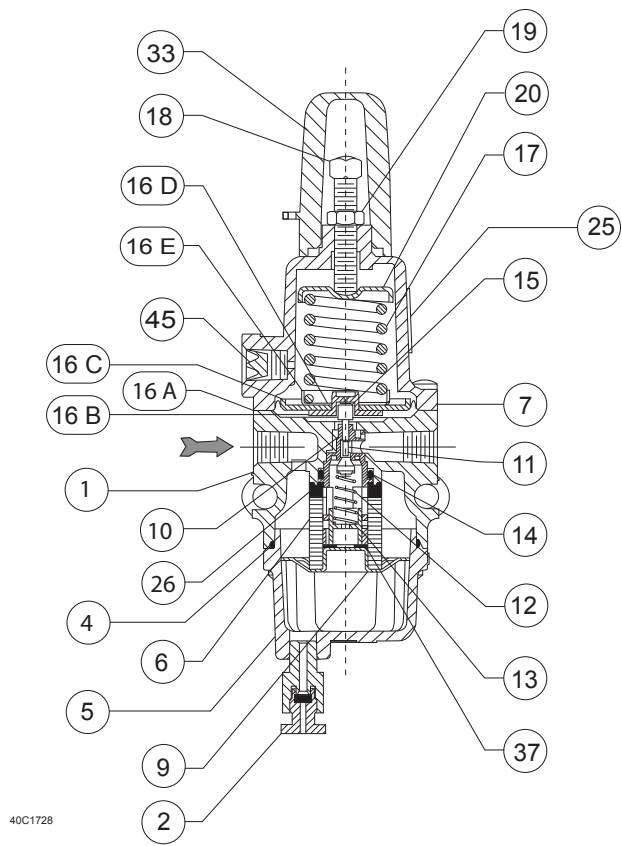


Figure 2. 67CFS Series Assembly

67CFS Series

Industrial Regulators

Emerson Process Management Regulator Technologies, Inc.

USA - Headquarters
McKinney, Texas 75069-1872 USA
Tel: 1-800-558-5853
Outside U.S. 1-972-548-3574

Asia-Pacific
Shanghai, China 201206
Tel: +86 21 2892 9000

Europe
Bologna, Italy 40013
Tel: +39 051 4190611

Middle East and Africa
Dubai, United Arab Emirates
Tel: +971 4811 8100

Natural Gas Technologies

Emerson Process Management Regulator Technologies, Inc.

USA - Headquarters
McKinney, Texas 75069-1872 USA
Tel: 1-800-558-5853
Outside U.S. 1-972-548-3574

Asia-Pacific
Singapore, Singapore 128461
Tel: +65 6777 8211

Europe
Bologna, Italy 40013
Tel: +39 051 4190611
Gallardon, France 28320
Tel: +33 (0)2 37 33 47 00

TESCOM

Emerson Process Management Tescom Corporation

USA - Headquarters
Elk River, Minnesota 55330-2445 USA
Tel: 1-763-241-3238

Europe
Selmsdorf, Germany 23923
Tel: +49 (0) 38823 31 0

For further information visit www.emersonprocess.com/regulators

The Emerson logo is a trademark and service mark of Emerson Electric Co. All other marks are the property of their prospective owners. Fisher is a mark owned by Fisher Controls, Inc., a business of Emerson Process Management.

The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. We reserve the right to modify or improve the designs or specifications of such products at any time without notice.

Emerson Process Management does not assume responsibility for the selection, use or maintenance of any product. Responsibility for proper selection, use and maintenance of any Emerson Process Management product remains solely with the purchaser.